Manistee County Board of Commissioners

Manistee County Courthouse • 415 Third Street • Manistee, Michigan 49660

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(231) 723-3331
CONTROLLER/ADMINISTRATOR
Thomas Kaminski
(231) 398-3500

MANISTEE COUNTY
GREEN TEAM/RECYCLING COMMITTEE

Friday, February 6, 2009
1:30 P.M.

Manistee County Courthouse & Government Center
Board of Commissioners Meeting Room

AGENDA

1) County Vehicle RFP (APPENDIX A)

2) NAHB Chapter - Melissa Reed

3) Fairgrounds - Kevin Mulvihill (APPENDIX B)

4) Sustainable Task Force (APPENDIX C)

5) Domestic Hot Water Use

6) Other Items from Committee Members

7) Adjournment

[rn h:\agendas\Green Team 020609]

APPENDIX A

DRAFT

MEMORANDUM

TO: All New Vehicle Dealerships in Manistee County (Benchley Buick Pontiac GMC; Watsons Manistee Chrysler; Manistee Ford Mercury, Inc.; Yates Chevrolet)

FROM: Thomas D. Kaminski, County Controller/Administrator

DATE: February 6, 2009

RE: Request for Vehicle Proposal

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The Manistee County Board of Commissioners is accepting proposals from all new vehicle dealerships in Manistee County for the purchase of a multi-functional utility vehicle which will be used by County employees for official government business. The vehicle will be used by employees for travel to meetings and conferences, but will also be used a good portion of the year by the Appraiser in the Equalization Department for performing field work throughout the county. This will require driving on rough and uneven terrain at various times throughout the year. For this reason, the County is requesting that your proposal include a vehicle that meets the energy efficiency requirements listed below, but also includes front-wheel drive, all-wheel drive and/or four-wheel drive. You should also be aware that on Tuesday, April 22, 2008, the Manistee County Board of Commissioners took action which indicated that **"when new vehicles are being considered by the County, hybrid vehicles be purchased when appropriate."** Additional specifications shall include the following:

- Minimum of five passenger capacity, four door, with automatic transmission
- Color = optional based on availability
- **Fuel efficiency = at least 25-32 miles per gallon**
- Dual airbags
- Air conditioning
- ABS
- Defroster - electric, rear window
- Floor mats - manufacturers standard, front and rear, color coordinated
- Glass - tinted, all around
- Keys - two sets with code numbers
- Lights, daytime running (if available from manufacturer as standard equipment)
- Radio AM/FM manufacturer standard
- Speed control
- Steering - power, tilt wheel
- Power locks
- Tires, radial - manufacturer standard

- Interior seat upholstery - manufacturer standard
- Windshield wipers - dual, intermittent, electric with automatic type washers
- Vehicle should have sufficient ground clearance for traveling on uneven terrain.
- Warranty information (to be included in price proposal)
- Please provide delivery time frame.
- Please list any other equipment specifications included with the vehicle.
- Please provide safety ratings on all proposed vehicles.
- Please provide dealer contact information (name, telephone number).
- **All vehicles must be equipped in compliance with all applicable federal motor vehicle safety standards and regulations.**
- Price, which includes all additional charges and fees (**Manistee County is a tax-exempt governmental unit, and is therefore exempt from sales tax**).

Based on the specifications indicated above, the County is requesting that you please provide a price proposal for one or more vehicles which you feel comply with these specifications. All proposals shall be submitted no later than 5:00 P.M. on Monday, March 2, 2009. Proposals shall be submitted to the Manistee County Controller/Administrator's Office, 415 Third Street, Manistee, MI 49660. All proposals shall be provided in a sealed envelope clearly marked "Vehicle Proposals". Questions regarding these specifications should be directed to Thomas D. Kaminski, County Controller/Administrator at 231-398-3500.

All proposals will be reviewed by the Manistee County Green Team. Final action on the purchase of a vehicle will be considered by the Manistee County Board of Commissioners on Tuesday, March 17, 2009. Manistee County reserves the right to reject any or all proposals without cause. If the proposal does not comply with all criteria and specifications set forth in this request for proposals, please disclose all variances in detail.

[rn h:\correspondence\memo vehicles 020509]

APPENDIX B

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BENTON HARBOR, MI
SOUTH BEND, IN
FORT WAYNE, IN

MANISTEE GREEN

DATE: January 9, 2009

TO: Project Team

FROM: Kevin Mulvihill

RE: County Fairgrounds Project Outline

County Fairgrounds

Fairground Requirements
The following are requirements for events and future camping area. Showers would be used by event staff.
- Lift Station
- Barrier Free Toilets
- Barrier Free Showers

Construction Feasibility
- High water groundwater
- Future water level
- Cost of foundations on moisture laden soil

Operations
- Rodeo and Sprint car races put reservation fee at risk
- Additional, appropriate, events are needed to provide a stronger income stream for the Fair

Large Scale Planning Issues
- Fairground location in county
- Coordination with Onekama Village development goals
- Coordination with Manistee County Goals

Opportunities
There is an opportunity to develop the needed facilities with a sustainable approach. Not only will the Fairground benefit from energy saving, but the County "Green" image would be enhanced as well.

Approaches

One possible approach would be to provide a barrier free, trailer mounted, self contained toilet room and shower room. Please refer to the photos and sketches of the Kohler trailer toilet facility.

The trailer would not be susceptible to foundation settlement. The ability to relocate the facilities in the future would assure that as the Fairgrounds develops; the facilities would be positioned properly. Or should the County choose to relocate to another part of the County, the toilet facilities could follow.

Wastewater treatment would be handled on the trailer assembly. This might be accomplished through the use of composting toilets, or a waste water treatment unit. There are a number of systems available to treat gray water and black water waste. These systems would negate the question of the suitability of the soil's percolation capabilities.

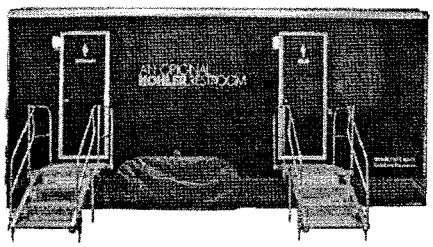
Power requirements are not high for this type of facility and photovoltaic panels could be mounted on the trailer exterior.

B-3

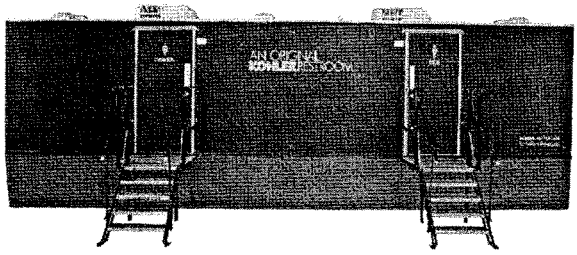
Luxury Restrooms

KOHLER. RENTAL

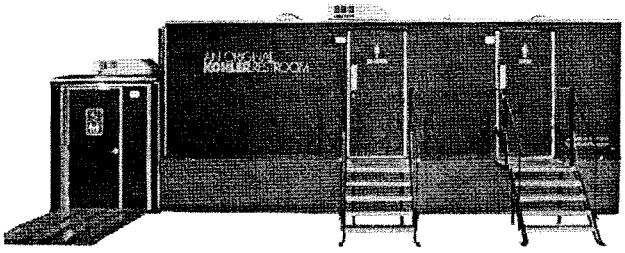
24′ Small/32′ Large/ 32′ ADA Combo Luxury Trailer



24′ Trailer



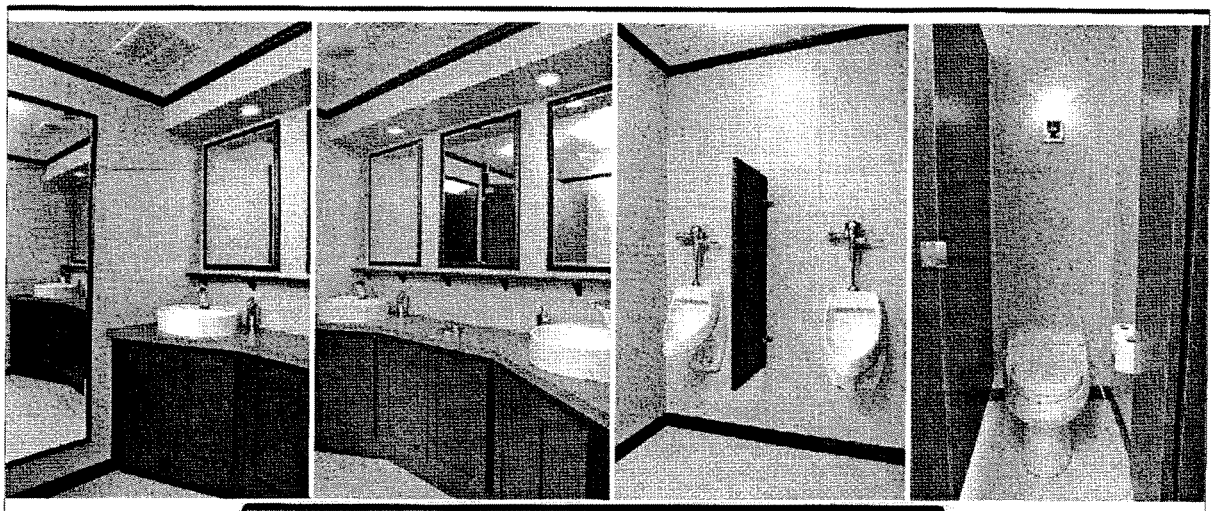
32′ Trailer

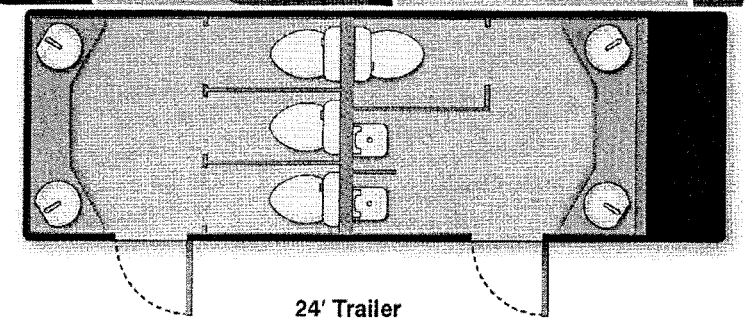


32′ ADA Combo Trailer

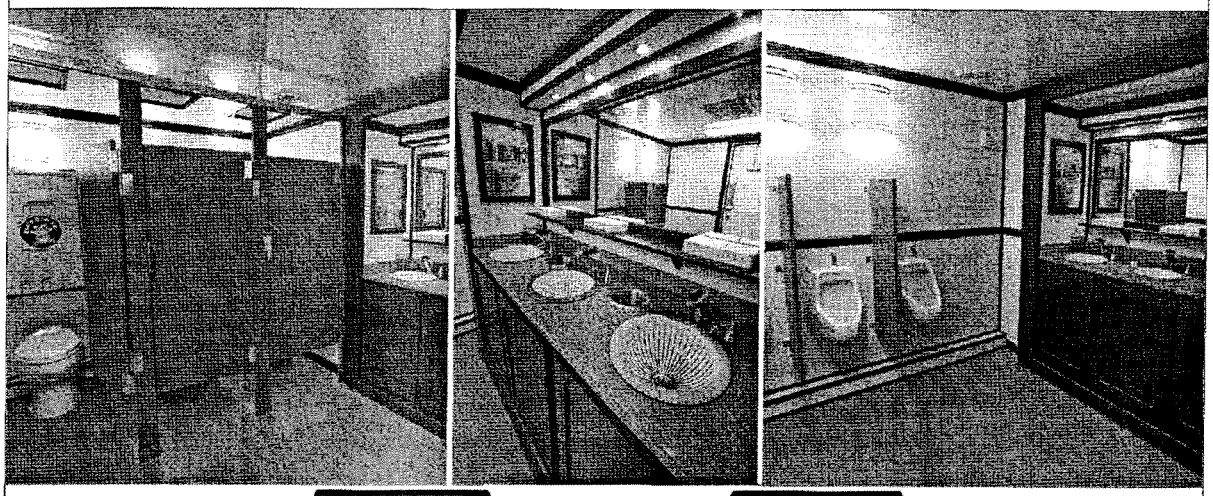
Luxury Restrooms

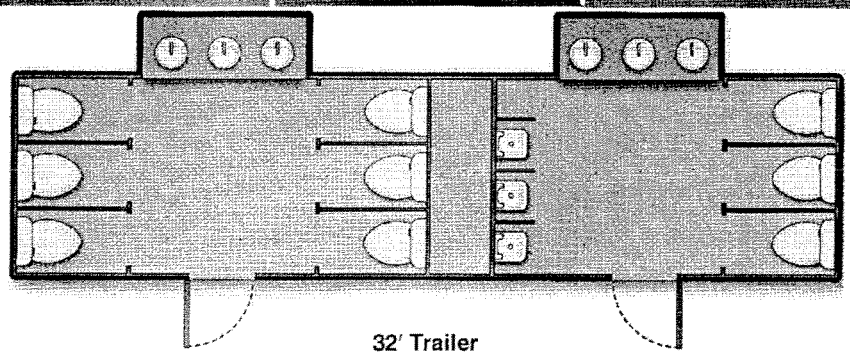
- Kohler Rental Power provides one-source responsibility for the mobile trailers and accessories.
- Luxury restrooms available in three sizes—24′ small, 32′ large, and 32′ Americans with Disabilities Act (ADA) combo.
- Luxury restrooms feature Kohler® plumbing products.
- Luxury restrooms provide portable luxury from a global plumbing leader with over 130 years of history producing premium bathroom designs.
- Luxurious trim and finish materials are used.
- Circuit breakers protect all AC electrical circuits.
- Restroom Features
  - Individual men's and women's facilities.
  - Urinal partitions in men's restroom.
  - Warm water faucets.
  - Fully integrated temperature controls.
  - Soap dispensers.
  - Trash containers.
  - Full length mirrors.
- Trailer Features
  - Hookups for local connection to electrical power supplies.
  - Hookups for local connection to cold water supplies.
  - Internal electric water heater providing hot water.
  - Integrated tank for wastewater containment.
  - External night lighting at stairs and doors.
  - Running lights with standard DOT 7-way receptacle.
  - Standard DOT hitch and landing gear for stabilization.
  - Additional room for utility connections, fire extinguisher, and storage (cleaning supplies, etc.)





24' Trailer





32' Trailer

B-5

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Phone 920-459-1634; Fax 920-459-1846
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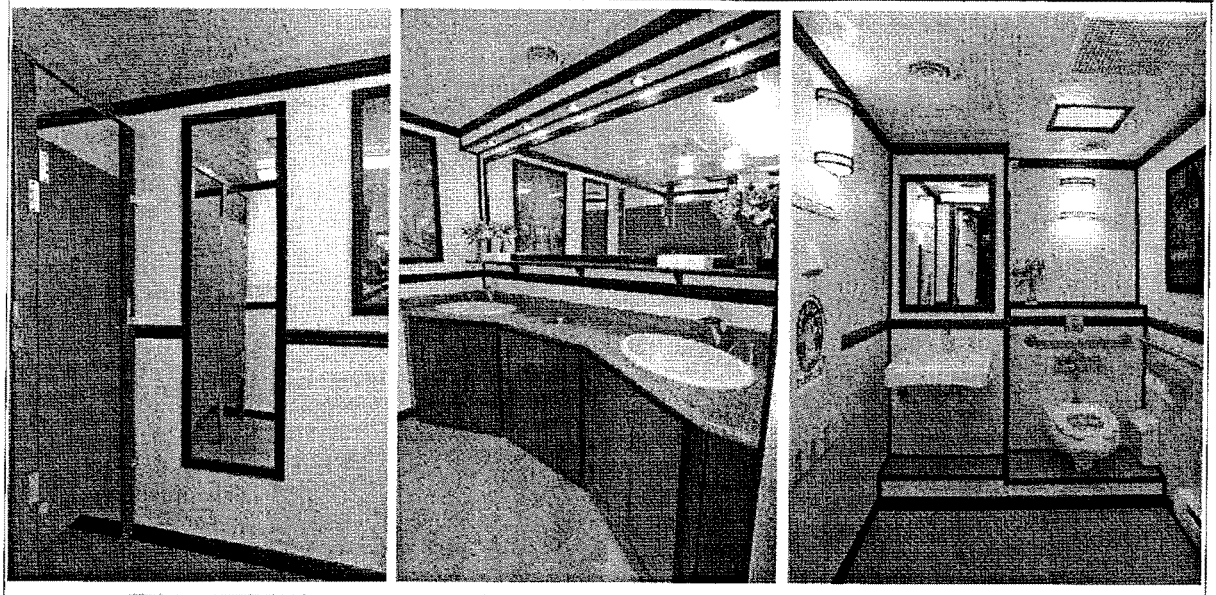

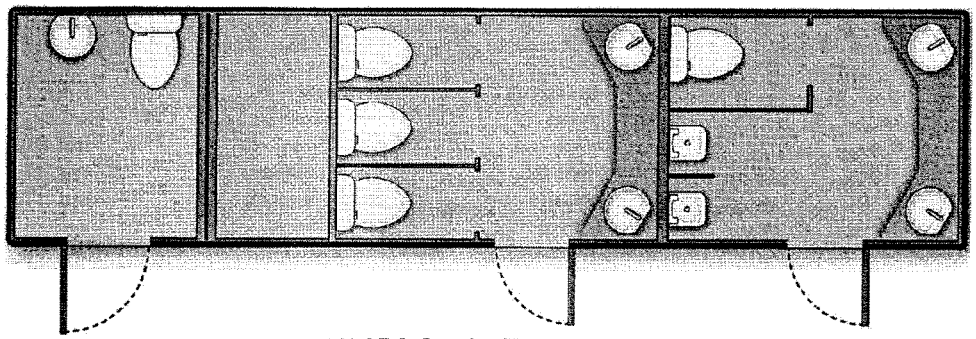

32′ ADA Combo Trailer

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B-6

Ionpure® VNX High Flow Continuous Electrodeionization (CEDI) Modules

IONPURE VNX Module--VNX50
Continuous Electrodeionization Module

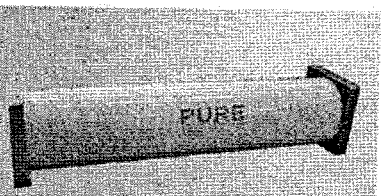
The VNX module is designed with proven IONPURE® continuous electrodeionization (CEDI) technology to produce high purity water. Patent pending, flexmount connectors create a support system for the modules which eliminates the need for a skid, simplifies system design and reduces cost.

Each VNX industrial module has a nominal flow rate of 50.0 gpm (11.4 m3/hr). Multiple 50 gpm modules provide for system designs with flow rates up to, and greater than 1000 gpm.

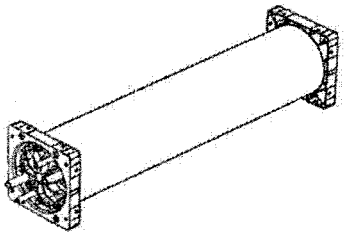
VNX Series Features

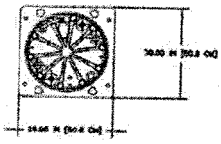
- Generate Mixed Bed deionized water without the use of chemicals
- No need for acid/caustic, neutralization system or exchangable DI tanks
- Continuous production instead of batch with consistent quality
- Most compact footprint in the industry
- Can be operated in both horizontal and vertical configuration
- Significantly lower operating costs than conventional Ion Exchange
- Cylindrical housing design, "RO like" interconnects
- Robust, leak free operation
- Large flow modules reduce system cost and simplify skid design

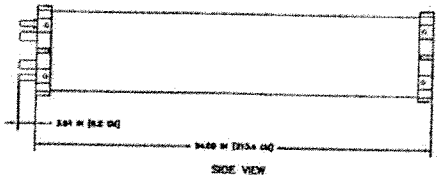
IONPURE

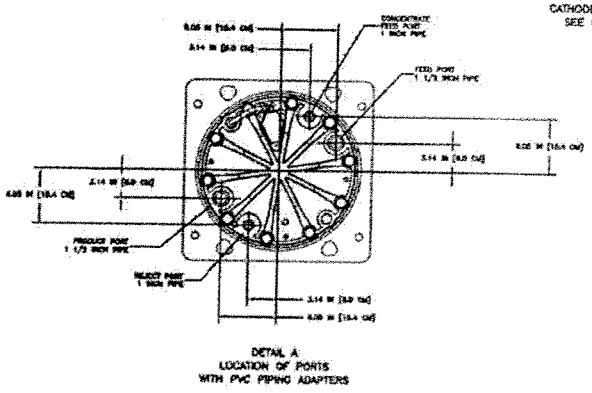


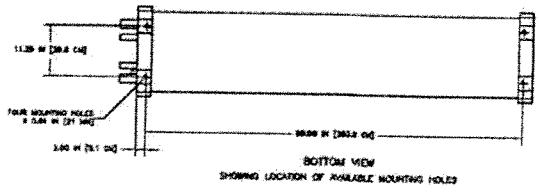
For additional information call 866-876-3340 or visit our web site at www.ionpure.com.











Ionpure® VNX™ High Flow Continuous Electrodeionization (CEDI)

MAXIMUM FEED WATER SPECIFICATIONS	
Feed Water Conductivity Equivalent, including CO_2 and Silica	< 40 µS/cm
Feed Water Source	RO permeate
Temperature	41–113°F (5–45°C)
Inlet Pressure	20–100 psi (1.4–7 bar)
Maximum Total Chlorine (as Cl_2)	<0.02 ppm
Iron (Fe)	<0.01 ppm
Manganese (Mn)	<0.01 ppm
Sulfide (S-)	<0.01 ppm
pH	4–11
Total Hardness (as $CaCO_3$)	<1.0 ppm
Dissolved Organics (TOC as C)	<0.5 ppm
Silica (SiO_2)	<1.0 ppm

TYPICAL MODULE PERFORMANCE	
Operating Parameters	
Recovery	90–95%
Flow Rate: minimum	25.0 gpm (5.7 m^3/hr)
Flow Rate: nominal	50.0 gpm (11.4 m^3/hr)
Flow Rate: maximum	75.0 gpm (17.0 m^3/hr)
DC Voltage	0–600
DC Amperage	0–20
Product Water Quality	
Product Resistivity	>16 megohm-cm (see note below)
Note: Actual performance may be determined using the IP Pro projection software available from Ionpure.	
Silica (SiO_2) Removal	90–99%, depending on feed conditions

PHYSICAL SPECIFICATIONS					
Diameter	Width	Height	Length	Shipping Weight	Operating Weight
17.5" (44.45 cm)	20.0" (50.8 cm)	20.0" (50.8 cm)	84.0" (213.3 cm)	610 lbs (276.7 kg)	825 lbs (374.2 kg)

OPERATING ENVIRONMENT

Installation should be indoors with no direct sunlight and it should have a maximum ambient room temperature of 113°F (45°C).

MATERIALS CONSTRUCTION

1. Wetted components of the VNX module consist of: PVC, polypropylene, ion-elective membranes, ion exchange resins, and thermoplastic elastomer.
2. Housing is fiberglass reinforced plastic (FRP). Standard color is white with glossy finish. Custom colors and labeling are available.
3. The Flexmount bracket/end-block assembly (patent pending) is an epoxy painted aluminum casting suitable for securing modules to the frames and/or each other in Ionpure approved configurations.

QUALITY ASSURANCE STANDARDS

CE marked. Each module is factory tested to meet strict IONPURE and industry standards and is manufactured in an ISO 9001:2000 facility.

ORDERING INFO

1. Part number to use when ordering is IP-VNX50 for horizontal and IP-VNX50V for vertical configuration.
2. Each VNX module has four process connections: Feed, Concentrate Feed, Product, and Reject. PVC plugs are included with the module.
3. Use with Ionpure Connector kit (Part# IP-VNX-CK-PVC) which include four (4) PVC end connectors.
4. Also, use Optional Ionpure Junction box kits (Part# IP IP-VNX-JB-6, IP-VNX-JB-12, or IP-VNX-JB-25) which include a NEMA 4X junction box, quik connector and 6', 12' and 25' power cable, respectively.

CONFIGURATION DETAILS

The "single" VNX modules are tested for performance verification individually. The VNX module is factory tested to verify the interconnections (plumbing and electrical) are correct and leak-free.

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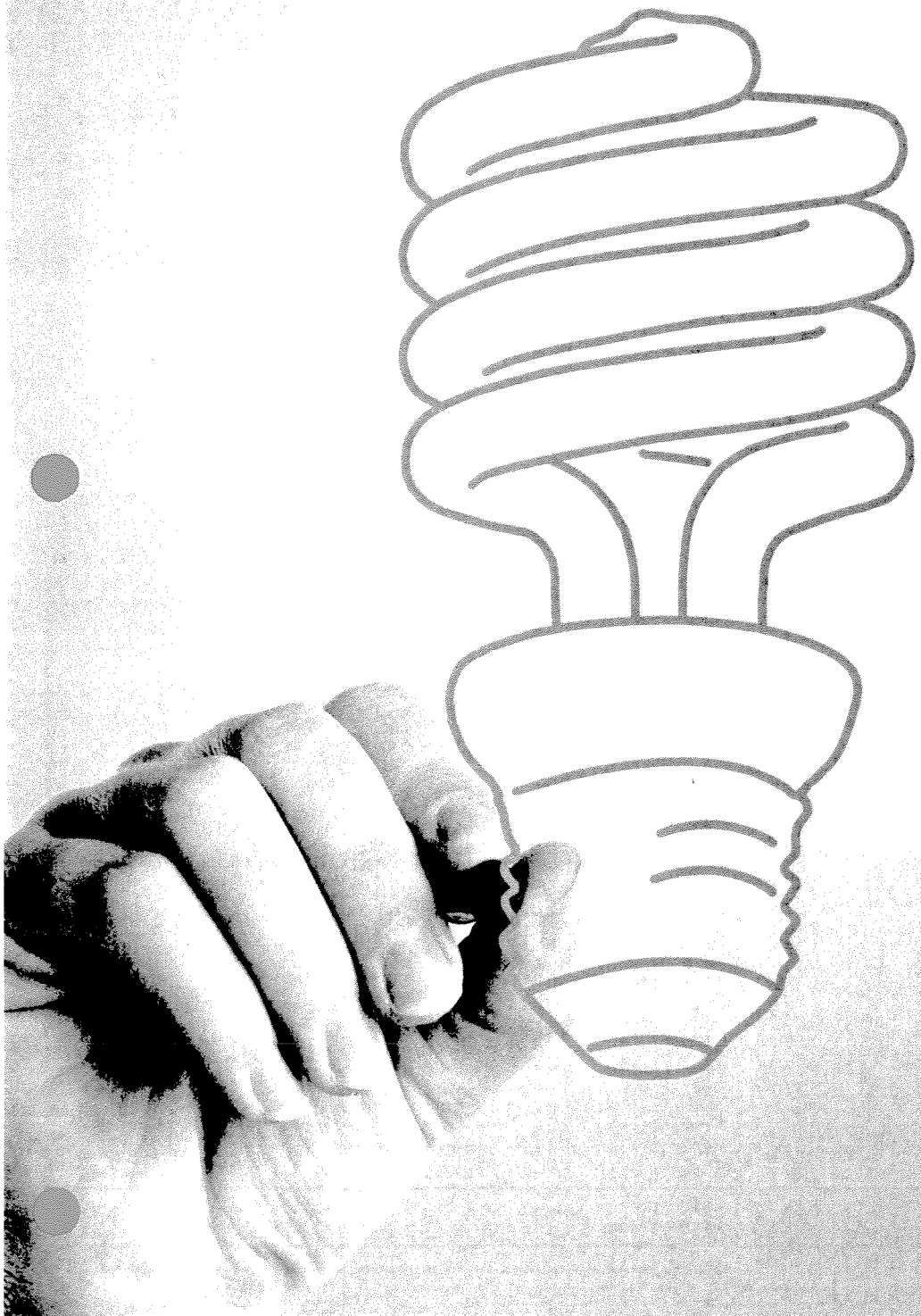
APPENDIX C

Cutting



Local governments dim their energy demands.

By John W. DeWitt

merica's local and state governments annually spend more than $10 billion on energy, and much of it is wasted. Driven to reduce energy consumption and its environmental effects, many are moving aggressively to "power down."

"The idea that sustainability is important is permeating the nation," says John Soladay, director of environmental health for Albuquerque, N.M. "There are 850-something cities that have committed to reducing greenhouse gases. We're all scrambling, but at least we're moving."

The recessionary economy has added another reason to become energy efficient, says Alan Shark, executive director of the Washington-based Public Technology Institute. "Everyone is in this hunker-down mentality, and governments don't want to ask residents for more money when they are already strapped," Shark says. "People want to do the right thing and save the planet, but when economic reality faces people, they become more pragmatic."

So, local governments of all sizes are retrofitting air conditioning and lighting systems in buildings, replacing streetlights with light-emitting diodes (LEDs) and buying alternative fuel vehicles. Albuquerque; Springfield, Mass.; and Palm Desert, Calif., are three communities that already have taken innovative energy-saving steps to build more efficient futures.

Albuquerque has been busy in the five years since three-term Mayor Martin Chávez signed onto the bipartisan Mayors' Statement on Global Warming, an early version of the Washington-based U.S. Conference of Mayors climate protection agreement. To start, the mayor assembled an executive-level "green team" of department directors and others to build a plan toward sustainability — reducing greenhouse gas reduction, the amount of natural resources burned and dependence on foreign oil, Soladay says. Nine months later, a sustainable development strategy with eight core components emerged. "This plan in itself is a huge step for most cities, but it establishes a base framework for moving ahead," Soladay says.

Though environmental sustainability has been a main focus for the mayor, Albuquerque has benefited from a succession of energy conservation initiatives dating back to the late 1980s, when the city began converting part of its fleet to compressed natural gas (CNG). "By the early '90s, we recognized the importance of doing things like changing out light fixtures and ballasts, so we funded a line item to do that," Soladay says. "By the late '90s, for bigger and more innovative projects, we adopted a program setting aside 1 percent of total capital improvement funding to target energy conservation."

In 2007, the mayor and city council increased the set-aside to 3 percent, directing $4.6 million toward infrastructure energy improvements. "Albuquerque is the only city I've found that actually funds their improvements that way," Soladay says.

The city also tracks its transportation-related energy use and greenhouse gas emissions and has reduced them. Today, more than half the city's fleet operates on alternative power sources — E85 (85 percent ethanol 15

C-3

percent gasoline), B20 diesel, CNG and hybrid engines. "We developed internal purchasing policies that mandate not only alternative fuels, but the most efficient vehicle for the application," Soladay says. "There's a strict review process attached to the mandate, and we put our green report card on our city's Web site to show that the numbers are verified, can be duplicated and measurements are believable."

Other savings come from energy-efficient traffic signals and lighting on streets and parking lots. "The payback is very short on LED traffic light conversions," Soladay says, especially now that costs have been reduced from $150 to below $50 per 12-inch light fixture. Conventional bulbs are still cheaper at $15 each, but they have to be changed every 18 months, versus every 10 years for an LED.

FACILITIES FIRST

Going green also is the new wave for the old New England industrial center of Springfield, Mass. Spurred by the 2006 election of a new mayor, Domenic Sarno, the city has moved aggressively over the past two years to reduce energy consumption in its fleet and in its aging infrastructure, where the average building age is 54 years and the oldest school dates back to 1896.

As a key component of its energy-saving efforts, Springfield hired Buffalo Grove, Ill.-based Siemens Building Technologies to replace the ancient oil-fired boilers in more than two dozen city buildings, and install automatic light sensors and energy misers on computers and vending machines. The heating system upgrades, financed through city bonds, will pay for themselves in 12 years, and electricity consumption has been cut by 2.5 million kilowatt hours.

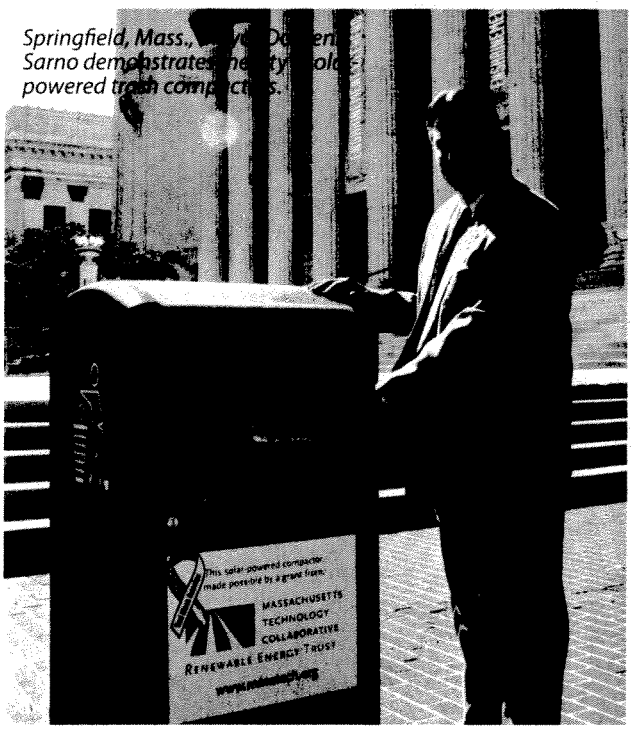
Springfield is taking other steps toward the city's sustainable future, Sarno says, including piloting a single-stream recycling program, hosting an annual green forum, and hiring an executive to coordinate green initiatives, such as green design, sustainable development and attracting green business to the city. The city also has announced a pilot plan to purchase four hybrid Ford Escapes for the parks division. Solar energy — even in the northern, snow-belt city — also is playing a role. The city has installed solar-powered trash compactors from Needham, Mass.-based BigBelly Solar and soon will request bids for photovoltaic panels on school buildings.

PRIVATE PARTICIPATION

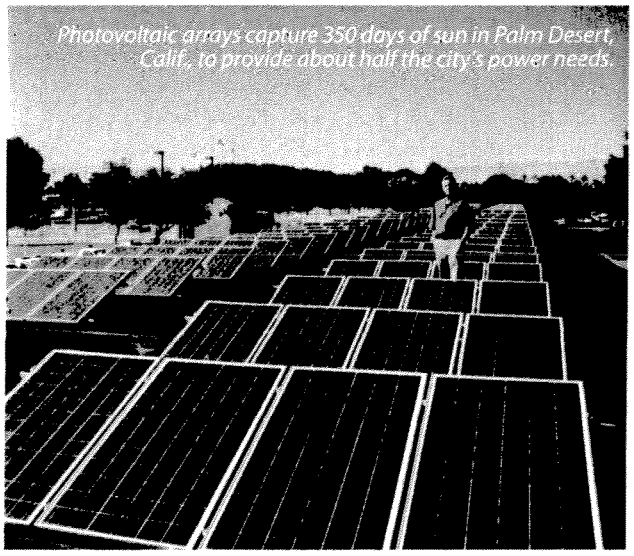
Even the small city of Palm Desert, Calif., has made itself a force for energy conservation — in a desert locale where the demand for summertime air conditioning consumes 150 percent more power than other areas of southern California, according to Patrick Conlon, director of the city's office of energy management. With a self-imposed deadline of December 30, 2011, the city has committed to reducing energy consumption by 30 percent — and that includes homes and businesses.

Palm Desert's government already has made significant progress toward its goal. Harnessing 350 days a year of sunshine, about half of government's electricity

More than half of Albuquerque's fleet operates on alternative power sources.



Springfield, Mass., Mayor Domenic Sarno demonstrates the city's solar-powered trash compactors.



Photovoltaic arrays capture 350 days of sun in Palm Desert, Calif., to provide about half the city's power needs.

C-4

comes from photovoltaic arrays. Additionally, all new government buildings must attain at least a silver rating by the Washington-based U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Green Building Rating System.

Palm Desert also is challenging the private sector to cut energy use by 30 percent at the end of 2011, and it is offering to fund private-sector energy conservation through unlimited government-backed loans to businesses and homeowners. "Time and again people say, 'I know I have a 25-year-old air conditioner that needs to be replaced, and I know my energy bills are $800 a month, but it's not a good time to get a home equity loan to put in a new $10,000 air conditioner,'" Conlon says.

City officials worked with local state assembly representative Lloyd Levine to create the Energy Independence Act that passed in July to allow private-sector energy conservation loans. Now, cities and counties can set up special energy districts, where business and residential property owners can borrow from the government and pay back the loans through their property taxes. Furthermore, local governments in California now can sell bonds to fund their private-sector loan programs.

To jump-start the loan program seeded by grant funding from the California Public Utilities Commission, the city council appropriated $2.5 million from its general fund in late August. "We have already spent $1.6 million, and people are standing in line for the loans," Conlon says. "The bad news is I have to ask the city council for more money. Bond packages take about 90 days to put together, and I don't want to interrupt this program."

Palm Desert offers 20-year loans for improvements at a 7 percent interest rate, with a $5,000 minimum and no maximum. Authorized improvements include solar panels, natural gas fuel cells, white roofs and EnergyStar refrigerators. "It's not a personal loan, so we don't have to concern ourselves with credit history, loan-to-value ratios, and so on," Conlon says. "It's just an assessment on the property, just like a curb or gutter or sewer assessment, and it stays with the property."

LEADERSHIP LESSONS

Governments that reduce energy consumption and improve sustainability do more than plan and implement good programs; they dedicate leaders to the task and ensure accountability. "Where you find successes, you find not just leadership, but what I call championship — an energized cheerleader with substance who is out there keeping the energy issue alive in a meaningful way," Shark says.

In Springfield, Mayor Sarno's leadership approach has combined energy conservation, environmentalism, urban redevelopment, and an emphasis on the arts as integrated quality-of-life issues that will attract green-oriented businesses and residents downtown. Sarno's long-term vision is closely tied to saving money and reducing pollution from energy consumption.

Palm Desert officials quickly recognized that meeting their goal required support beyond their capabilities. Residents and businesses have taken action, southern California utilities funded grants, and the state assembly and governor approved the bill allowing local governments to float bonds to loan money to the private sector for energy conservation. Next, seeking even lower interest rates on energy conservation loans, Palm Desert leaders and their U.S. congressional representative, Mary Bono Mack, have set their sights on the IRS tax code. "Cities historically have sold tax-free municipal bonds to fund public works, but the IRS has ruled that because our loan program involves improvements to private property, they have to be taxable municipal bonds," Conlon says. "The market for them is very small, whereas there's a big market for tax-free municipal bonds, which are 2 to 3 percent cheaper."

If Palm Desert's latest push is successful, "It would help cities throughout America, and also would help the loan applicants, because cities could pass on the savings to them," Conlon says.

And, in Albuquerque, the mayor's task force is plotting a comprehensive climate action plan. "When we're done, we will have established clear reduction targets and a plan for us to achieve those targets," Soladay explains, emphasizing that continued support from top leadership "is the driving force that makes things happen."

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